CHAPTER 3
PLAN OF CONSERVATION & DEVELOPMENT



ENVIRONMENTAL RESOURCES

Overview

The Town of Darien seeks to preserve the ecological integrity and sustain all natural resources within the town. These resources have intrinsic value and are also critically important to the quality of life in Darien and, to a significant extent, in nearby communities. While Darien is nearly fully developed, all future land use activity must still be sensitive to encroachments and effects, both direct, and indirect, on valued resources. Development must be reasonably related to the carrying capacity of the land and mindful of its compatibility with the desired community character as expressed in this Plan, without creating harmful and unnecessary environmental impacts.

Resources included are aquifers; watercourses and watersheds; wetlands; floodplains; coastal resources; and air quality. Appendix A3 contains more details regarding these resources, including maps showing their various locations within the community.

Policies

To preserve the quantity and quality of drinking-water aquifers and protect primary and secondary aquifer recharge areas.

To preserve and protect watercourses in their natural state through establishment of appropriate river buffers and by strictly regulating the location of structures and activities in order to prevent encroachments near or within these resources and wherever possible, prevent the filling or grading of watercourses and their banks. When practical, encourage and promote restoration of watercourses and watersheds.

To minimize further loss of inland and tidal wetlands, to protect and enhance the quality of wetlands in the community, and to restore degraded and/or filled wetlands wherever possible.

To preserve and enhance public use and enjoyment of the Town's coastal resources as well as to ensure current and future ecological integrity of those resources.

To reduce the potential for loss of life and property resulting from flood conditions, both for existing and future development, and to protect the natural flood carrying capacity of all floodplains.

To improve local air quality when possible and practical.

Recommendations

1. Regulatory Changes-Consider recommendations regarding regulatory changes in four areas: Zoning Regulations, Subdivision Regulations, Inland Wetlands and Watercourses Regulations, and Harbors Ordinances.

Zoning Regulations

The Planning and Zoning Commission should consider, review, or study:

- Adding design standards for the required erosion and sedimentation control measures and stormwater management facilities to supplement the graphics currently provided.
- Acknowledging the need to comply with the Inland Wetlands Regulations within the Zoning Regulations.
- Requiring the submission of grading, drainage and erosion control plans for all construction projects which involve site disturbance.
- Amending the manner for calculating Lot Area to exclude sensitive environmental resources such as wetlands, watercourses, and steep slopes.
- Amending the definition of Building Coverage to include all impervious surfaces, including all accessory buildings and impervious driveways, parking areas, walks, and terraces, or alternately create a maximum Developed Site Area within all residential zones.
- Adding a requirement for a 100 foot buffer between all new development and tidal wetlands
- Amending the section of the Zoning Regulations regarding *Exempt Activities Not subject to Coastal Site Plan Review* to make construction of, addition to, or modification of any structure constituting an increase in lot coverage of more than 25 percent subject to coastal site plan review.
- Formalizing the pre-application review process to strengthen opportunities for town planning and zoning professional staff to guide applicants in protecting environmental resources when preparing site development plans.
- Using native species, or those adapted to New England, for all vegetated stormwater management systems, such as grass swales or vegetative buffers. Prohibiting non-native invasive species as defined by the Connecticut DEP.
- Consider requiring an upland tidal wetlands application to the Environmental Protection Commission as part of the Coastal Site Plan Review.

- Considering an ordinance or other regulatory initiatives protecting trees.
- Considering establishment of an Aquifer Protection Ordinance.
- Amending the Zoning Regulations to strengthen floodplain regulations by limiting the number of improvements occurring below the "substantial improvement" threshold by placing a time frame on individual improvements.
- Adding provisions to the Zoning Regulations on parking to provide incentives for creation of shared parking lots and use of pervious parking materials, internal landscaping, and natural stormwater management structures.
- Referencing the need for an erosion and sedimentation control plan and stormwater management features in the section on site plan requirements.
- Add provisions for fugitive dust control for development or redevelopment projects where dust control may be a concern.



Subdivision Regulations

Consider or study:

- Amending the Subdivision Regulations to increase required open space as part of any subdivision from 10 percent to 15 percent or greater.
- Considering allowing the imposition of fees in lieu of open space, which may provide funds to acquire land to assist in creating open space corridors ("greenways") throughout the community, rather than scattered open space pockets.
- Amending the Subdivision Regulations to prohibit the permanent establishment of any new private roads as part of any subdivision or residential development without first requiring the granting of a drainage easement in favor of the Town.

Inland Wetlands and Watercourses Regulations

- Amending the Inland Wetland Regulations to note that a review by staff will occur as part of the application process.
- Formalize the pre-application review process to strengthen opportunities for town inland wetlands professional staff to guide applicants in protecting environmental resources in preparing site development plans.
- Consider expansion of the regulated upland review area to 100 feet from wetlands and watercourses.
- Consider establishment of flood and erosion control regulations.

Harbors Ordinances

- Update Boats and Harbors Ordinances for stronger and broader controls on activities that can lead to coastal water degradation
- 2. Protection Measures Continue to develop ways to protect open space by caring for environmentally sensitive areas, identify opportunities to reduce impervious surfaces and coordinate with neighboring towns to protect shared local watersheds.
 - Consider the adoption of a Darien stormwater ordinance that includes an illicit discharges prohibition and language referring to the best management practices as described in Connecticut's stormwater guidance manual.
 - Consider revising site and subdivision plan submission requirements to require stormwater management plans.
 - Town of Darien should consider the establishment of a separate Conservation Commission.
 - Develop a Greenways/Open Space Plan for Darien and propose any identified Greenways to become part of the State's officially designated Greenways System. Coordinate with non-profit land trusts in developing such a Plan. Specific opportunities which should be pursued (in no particular order) include:
 - Integrate the Greenways/Open Space Plan with resource protection tools to maximize the viability of creating greenways.
 - Develop a Town-wide map depicting environmentally sensitive areas, including potential wildlife corridors.
 - Survey Town of Darien properties to identify opportunities to reduce impervious surface areas used for parking, recreational facilities, and school facilities. Also, identify existing

private properties with potential for yielding reductions in impervious surfaces, such as large parking lots, and seek voluntary cooperation of owners.

 Develop written watershed management strategies and coordinate with neighboring towns for cooperative approaches for shared-local watersheds to improve water quality, especially with Stamford regarding the Rewak Well.



- Identify coastal viewshed resources within the coastal boundary to protect against any adverse impacts on such resources.
- Consider establishing an invasive species program.
- Create a list of fugitive dust control measures to be given to developers and contractors.
- Develop a specification for Diesel Equipment Emissions Controls for developer's construction contractors. Encourage this voluntary specification for medium to large construction projects.
- Establish a Developer of the Year Award program and/or Conservationist of the Year Award to recognize individuals or firms that have voluntarily adopted desired conservation and preservation measures.
- 3. Monitoring Monitor condition of environmentally sensitive and endangered areas. Coordinate monitoring activities with appropriate agencies such as the Connecticut Department of Environmental Protection (CTDEP), the Aquarion Water Company, and the Connecticut Department of Transportation.
- Document, monitor and bring into compliance Town-owned conservation easements.

Specific opportunities which should be pursued (in no particular order) include:

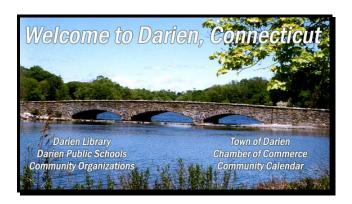
 Initiate a study to address flooding issues in the Heights Road and Lower Stony Brook areas and encourage active involvement by the CTDEP, Connecticut Department of Transportation (contribution of and to I-95) and affected homeowners during the study process.



- Explore hiring an environmental officer to perform environmental resource coordination and monitoring activities
- Coordinate regularly with Connecticut Department of Environmental Protection (CTDEP) on contaminated properties within Darien
- Periodically coordinate with Aquarion Water Company to monitor changes in drinking water demand and quality provided to Darien residents
- Monitor sedimentation trends in Darien's ponds, coastal areas, and watercourses
- Catalog existing stormwater management on private roads and large scale private developments
- Establish an inventory and assessment of vernal pools
- Monitor issues surrounding vernal pools and any state legislative actions relative to EPC or Conservation Commission jurisdiction to regulate
- Monitor development within areas identified by the CTDEP as areas containing Endangered, Threatened or Special Concern species to assess individual and cumulative impacts that could put the affected species at risk and to allow a proactive stance on protection or mitigation.
- Develop a water quality monitoring program, taking advantage of the Darien Nature Center and/or high school science classes or groups and Project Search (CTDEP program).
- Conduct a land use/build-out analysis to determine the potential for increase of impervious surfaces.

4. Education - Develop methods to educate the community as to "best management practices" for natural resources.

- Work in concert with non-profit education and other government organizations.
- Develop a series of brochures promoting 'best management practices' for natural resources targeted to homeowners. Mail these brochures to all Darien homeowners annually and/or in concert with other mailings. Topics to be covered in the brochures include:
 - Sound landscaping practices and stormwater management
 - o Recognition and avoidance of invasive species
 - How to protect wetlands (i.e. not dumping leaves, lawn clippings, or other debris in wetland and buffer areas)
 - Understanding tidal wetlands
 - How and why to minimize use of impervious surfaces for driveways, parking areas, pool areas, and outdoor patios
 - o Sound handling practices for small quantities of hazardous waste.
- Take advantage of Darien's web site to disseminate information to residents (http://www.ci.darien.ct.us). Press Releases can be another means of disseminate information.



- Explore hiring an environmental officer to:
 - o Help residents identify and eradicate invasive plant species on their property
 - Provide guidance to homebuilders and other contractors for environmentally sensitive home construction practices
 - o Help residents identify valuable resources on their property including wetlands, vernal pools, and tidal wetlands.
- Take advantage of the University of Connecticut's Nonpoint Education for Municipal Officials (NEMO) Program. NEMO offers free workshops and educational materials on natural resource-based planning to local land use commissions
- Establish a practice of distributing recommended 'best-management-practices' for water resource protection brochures to all applicants for subdivision, zoning, and building permit approval.

- Highly encourage and provide incentives to homeowners to use environmentally friendly design during renovation of their properties (techniques such as increased non-lawn landscaping for stormwater management and maintaining water resource buffers with native vegetation)
- Work with homeowners associations to enhance stormwater management on private roads



- Work and coordinate with the Darien Nature Center to seek ways to implement some of the Town's environmental educational initiatives.
- Work with the Board of Education and school bus operators serving within the Town of
 the recent state law that prohibits stopped school buses from idling their engines for more
 than three minutes. Also, inform the Department of Public Works of the three minute
 regulation to ensure compliance for town maintenance vehicles